

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024110**Date Inspected:** 02-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

**OBG Trial Assembly**

ABF issued ultrasonic inspection report number UT-13W-057 stating that OBG segment 13CW welds SEG3015A-008 and SEG3015A-009 joining the side plate to the bottom plate adjacent to the counterweight side had been ultrasonically inspected and accepted using scanning patterns A, B, C and D. This QA Inspector performed random visual and ultrasonic inspections of the weld listed above using scanning patterns A, B, C and D and items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. Weld #8 has no UT access due to OBG support, this area appears to have been ultrasonically inspected by QA Inspector B293 on 12-14-2010 and weld #9 no UT access from 5.3 to 5.9 meters due to an OBG support being in contact with the bottom plate. For additional information on these inspections see this QA Inspector's TL6027 Ultrasonic Test Report.

Visual Inspections of segment 13AE PP119 +1500mm to PP120 on the bikepath side upper surfaces

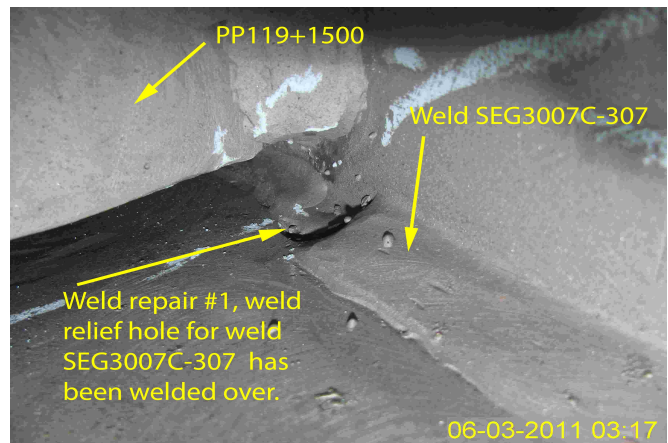
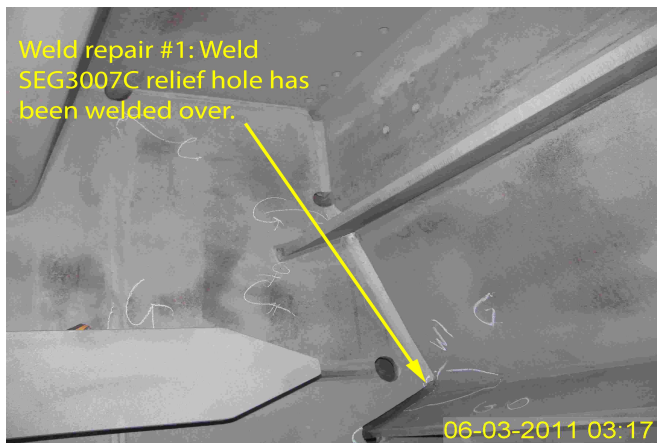
ZPMC requested Caltrans personnel to perform visual inspections of OBG segment 13AE between PP119+1500 to PP120 cross beam upper section on June 2, 2011 at around 02:40 hours following the initial pre-blast cleaning

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of the steel surfaces. This QA Inspector along with one other QA Inspector performed random visual inspections of these areas and observed the following items appear to require weld repairs. This QA Inspector observed item #1 and #2 as listed below and the other areas were identified by another QA Inspector and American Bridge (ABF) Inspectors. The following areas were marked on applicable drawings which were forwarded to dayshift QA Inspectors for tracking of repairs. See the photographs below for additional information.

1. The weld relief hole at the termination of stiffener plate weld SEG3007C-307 where it terminates at SEG3007G, panel point PP119+1500 has been welded over. Note: this might not be a weld repair, but it may require a significant effort to achieve a satisfactory weld relief hole and proper weld termination.
2. Closed Rib base material arc gouge on deck plate DP3080A second closed rib from weld SEG3007G-007 towards weld SEG3007G-010. This gouge is located approximately 900 mm from SEG3007G @ PP119 +1500 mm, towards SEG3007E. Depth of the gouge is approximately 2.0 mm.
3. Base material arc gouge between SEG3007E and SEG3007C on LD3026A inside the lifting lug closest to SEG3007E. Depth of the gouge is approximately 4.0 mm.
4. ABF marked "WELD" and taped over DP3080A closed rib closest to weld SEG3007G-010, where it intersects SEG3007G, PP119+1500.



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### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey +8615000026784, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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